AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE (OF PAGES
2. AMENDMENT/MODIFICATION NO. 3 R0017	. EFFECTIVE DATE 01/28/03	4. REQUISITION/PURG	CHASE REQ. NO. 5. PROJECT		IO. (If app	licable)
	4P0000	7. ADMINISTERED BY	(If other than Ite	m 6) CODE	DACA	85
US ARMY ENGINEER DISTRICT, AK CEPOA-CT (DACA85) PO BOX 6898		US ARMY ENGINEER DISTRICT, AK CEPOA-CO-SAO PO BOX 6898 ELMENDORF AFB, ALASKA 99703-6898				
SUSAN COYNER (907)753-28	38					
B. NAME AND ADDRESS OF CONTRACTOR (No.,		d ZIP Codel	(X) QA AMENIC	MENT OF SOLI	CITATION	INO
				02-R-0009 (SEE ITEM 11) 03/15/0		ORDER NO.
CODE 089C4 F	ACILITY CODE		10B. DATE	O (SEE ITEM 13)	i	
	ONLY APPLIES TO	AMENDMENTS C	E SOLICITATI	ONS		
The above numbered solicitation is amended as set Offer must acknowledge receipt of this amendment prior (a) By completing Items 8 and 15, and returning	to the hour and date specif Copies of the a ludes a reference to the sol PT OF OFFERS PRIOR TO THe	ied in the solicitation or a mendment; (b) By acknov icitation and amendment IE HOUR AND DATE SPE Ige may be made by teleg	s amended, by one vledging receipt of t numbers. FAILURE CIFIED MAY RESULT	this amendment or OF YOUR ACKNO IN REJECTION O	nethods: n each copy WLEDGEM F YOUR OI	ENT TO BE FFER. If by
12. Accounting and Appropriation Data (If required	7)					
PROJECT TITLE AND LOCATION: New F		nce Dock, Elmendor	f AFB, Alaska			
13. THIS ITEM AP				ORDERS,		
IT MODIFIES T	HE CONTRACT/ORD	DER NO. AS DESC	RIBED IN ITEN	Л 14.		
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO					T ORDER I	NO. IN ITEM
10A.						
B. THE ABOVE NUMBERED CONTRACT/ORDER IS N appropriation date, etc). SET FORTH IN ITEM 14	MODIFIED TO REFLECT THE PURSUANT TO THE AUTH	ADMINISTRATIVE CHAN ORITY OF FAR 43.103(b)	GES (such as chang	es in paying office	9, 	
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED	INTO PURSUANT TO AUTH	IORITY OF:				
D. OTHER (Specify type of modification and authori	ty)					
E. IMPORTANT: Contractor is not,	is required to sign this doc		copies t			
14. DESCRIPTION OF AMENDMENT/MODIFICATION						
PROPOSAL DUE DATE IS 31 JAN 2003, b	y 4:00 pm, local time	, at SEE SECTION	00100, PARA 2	2.3 for drop-or	ff locatio	n.
NOTICE TO OFFERORS: PLEASE MARK (RECEIVED, YOU ARE REQUIRED TO AC STANDARD FORM 1442.	OUTSIDE OF ENVEI KNOWLEDGE RECE	OPE IN WHICH BI	ID IS SUBMITT NDMENT ON	ED TO SHOV THE REVERS	V AMEN SE SIDE	IDMENTS OF
IMPORTANT NOTE: Keep in mind that the restricted and requires extra time to process the	pase is still under tight rough the Boniface Ga	security measures atte.	nd access to non	-DOD personn	el is limi	ted or
Except as provided herein, all terms and conditions force and effect.	of the document referen	nced in Item 9A or 10A	A, as heretofore c	hanged, remains	unchang	ed and in full
15A. NAME AND TITLE OF SIGNER (Type or print,		16A. NAME AND TI	TLE OF SIGNER (Type or print)		
	1450	400 100755 07:-	50 OF AMERIC:	y	160 51	TE CIONED
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATI			16C. DA	TE SIGNED
(Signature of person authorized to sign)	1	(Signat	ure of Contracting (Officer)		

DACA85-02-R-0007 Amendment R0017

Additional answers to proposer's questions are provided below:

Answers to Proposers Questions

1. On the Room Criteria Sheet for Shop Air Compressor: Plumbing and ventilation (battery) requirements are called for here, but if equipment (forklift and battery charger) is located elsewhere, are the floor drain and emergency eyewash/shower to remain or to be located with the equipment?

Response: The eyewash/shower and its associated floor drain need to be located near the battery charging station. The Shop Air Compressor Room also needs a floor drain.

2. Section 01010, 2.4.7 states that "Hard panel...doors may be proposed". Does this mean that the Contractor may select either the previously specified Megadoor product or a "hard panel...hangar door?

Response: See Amendment 15.

3. Section 01010, Paragraph 1.2.5.B.1 (page 2) calls for a 1-hour firerated, blast proof separation between the initial three maintenance bays and the fourth bay. Paragraph 1.2.5.B.3 states "The design shall allow visual supervision to all bays either at the main level or mezzanine level." If the fourth maintenance bay is built in the future, will it need to have visual supervision from the Dispatch and/or Office that we are building now? Do all bays need to be seen from Dispatch and all bays from Office or can some be seen from Dispatch and the others from Office?

Response: See Amendment 15. All Bays (4, including Option 1) shall have visual supervision from Dispatch.

4. Section 01010, Paragraph 2.4.14.B.1 (page 54) calls for 400mm x 400mm x 1830mm personnel lockers. The CORRIDOR Room Criteria Sheet (page 115) indicates 305mm x 305mm x 1825mm lockers. Please clarify.

Response: $400 \text{mm} \times 400 \text{mm} \times 1830 \text{mm}$ is the correct dimension.

5. The DISPATCH Room Criteria Sheet (page 117) indicates that a mezzanine location is desirable for supervision of Maintenance Bays. The TOOL ROOM Criteria Sheet (page 136) indicates immediate adjacency to the Hangar and Dispatch. A ground floor location seems appropriate for the TOOL ROOM. Please verify that DISPATCH and TOOL ROOM do not need to be immediately adjacent to each other.

Response: Tool Room shall be located on the ground floor.

6. The MAINTENANCE BAY Room Criteria Sheet (page 125) Door information states "...see Government Betterment #4 - "Mega-Door" required..."

There is no Government Betterment #4 listed in Section 01010,

Paragraph 1.2.8. Is MegaDoor allowed and/or required? It was stated at the pre-proposal meeting that MegaDoor was not an option.

Response: Megadoor is NOT an option, the diagram reference is incorrect.

7. Reference TANK AREA Room Criteria Sheet (page 132): Should the Acoustical information refer to Betterment #2 in lieu of #4?

Response: Correct

8. Reference TANK AREA Room Criteria Sheet (page 132): Should the Floor information refer to Betterment #3 (epoxy) in lieu of #2 (dry shake)?

Response: Correct

9. Reference TANK AREA Room Criteria Sheet (page 132): Should the Ceiling information refer to Betterment #1 in lieu of #3?

Response: Correct

10.

11. Section 01010, Paragraph 2.4.7 (page 48): How many MAINTENANCE BAY positions need to be accessed simultaneously? Is there a requirement that more than one MAINTENANCE BAY position be accessed simultaneously? This has a major impact on the design and cost of the hangar doors. (Door Pockets, number of rails, etc.) If more than one hangar bay is required to be accessed simultaneously the hangar door rails will have to extend past the walls of the hangar. Are door pockets optional, requiring the rails to be cantilevered per existing Hangar 10?

Response: All Bays must be accessible. No aircraft shall be required to move in order for another to exit or enter. The hardstand(s) must not impede aircraft access. The door configuration shall not encroach upon the required aircraft clearances.

12. Section 01010, (page 125): MAINTENANCE BAY AREA: 3048 mm / 10 ft. minimum clearance around aircraft to nearest obstruction, 4570 mm / 15 ft. clearance to nearest wall. Appendix 7 (Page 9) Table 7.2 Aircraft Separation Dimensions Inside Hangars. Illustrates a minimum clearance of 3 m / 10 ft. at the Door and 3 m / 10 ft at the Walls. What is the desired minimum clearance at the Hangar Door, Nearest Obstruction (columns) and Walls?

Response: 4.57 m is preferred clearance for adequate equipment mobility; 3.05 m is the minimum requirement.

13. Section 1010 paragraph 2.5.1 requires design loads be utilized per the latest edition of ASCE 7. Currently this is ASCE 7-98, but the 2002 edition (ASCE 7-02) is promised to be shipped in early January of 2003. Will this project be designed based on ASCE 7-98 or will the criteria change to ASCE 7-02 as soon as it becomes available?

Response: Use ASCE 7-98 for Basis of Bid. Any decision to use a newer version will be made at a later date.

14. Section 1010 paragraph 2.5.4 A and E requires design wind forces per ASCE 7 and defines the importance factor, basic wind speed, and exposure category for these calculations. Wind pressure calculations per ASCE 7 also require a decision as to whether the building is "enclosed" or "partially enclosed".

A building, which is classified as "partially enclosed" must be designed for much larger internal pressure or vacuum than an "enclosed" building. An opening in the windward wall as small as 4 square feet (0.37 square meters), may require a building to be classified as "partially enclosed". The Commentary Section of ASCE 7-98 touches on this issue. The last paragraph of Section C6.5.11.1 INTERNAL PRESSURE COEFFICIENTS states "Because of the great amount of air leakage that often occurs at large hangar doors, designers of hangars should consider utilizing the internal pressure coefficients for partially enclosed buildings in Table 6-7."

The possibility of opening a pedestrian door or typical leakage around large hangar doors during extreme wind events would cause some engineers to classify the building as "partially enclosed". Also, the size of the assumed opening has an effect on the increase in internal pressure or vacuum calculated, so assumptions must be made as to the size of the openings. Other engineers may be willing to assume that doors will not be opened during the most severe wind storms and ignore leakage at the hangar doors in order to justify the use of the lower "enclosed building" internal wind pressures. This less conservative interpretation of the wind code would result in a less expensive structure, cladding, doors, and windows, giving this design-build team a competitive advantage over other teams.

In order to ensure that the government receives a building which meets their desired wind resistance and to ensure more competitive bids by "leveling the playing field", would the government please define the "enclosed" or "partially enclosed" criteria to be used in wind pressure calculations for this project.

Response: The determining factors to classify the building as "enclosed" or "partially enclosed" is based upon the building configuration and opening size and shall be the responsibility of the Engineer of Record. The user does not want to be limited as to when any door may or may not be opened. The building shall remain operationally functional under the specified wind loading criteria.

15. Section 1010 paragraph 2.5.4 D requires design snow loads in accordance with ASCE 7 and CEPOA-EN-TE-ST criteria. Would the government please indicate where a copy of the CEPOA-EN-TE-ST criteria can be obtained?

Response: Delete the reference to CEPOA-EN-TE-ST criteria. Snow load criteria is given in paragraphs 01010-2.5.4.D (2) and (3).

16. Proposal and Preliminary Drawing Submittals - Would it be acceptable to submit our proposal drawings and all other preliminary submittals in soft metric units, with the understanding that the final contract documents will be submitted in hard metric?

Response: Hard metric.

17. RFP 01010-2.4.9 Para. D. Item 9. states "Install BMS per user requirements". What is a "BMS"?

Response: see Amendment 11, 12; this sentence has been deleted.

18. RFP 01010 2.7.2 Para. A. requires lighting of "adjacent tow-way". How far should new tow-way lighting extend? Also 2.7.2. Para B. refers to "taxiway" should this be "tow-way".

Response: To the point where the tow-way transitions to the area between the building and the hardstands. Yes.

19. RFP 01010 2.7.2 Para. B. requires tapered steel poles but does not specify what type of finish is required, i.e.: galvanized, painted etc. What finish is desired?

Response: Manufacturer's standard finish.

20. RFP 01010 2.7.3.11 d. requires a Y-Y connection. Referenced TM and AFJMAN documents show "multiple" and "single" grounding methods for pad-mounted transformer installations. The single ground system creates a "separately derived" service by isolating the (grounded) neutrals. Which is preferred at this location?

Response: Designer to coordinate with Base utility.

21. RFP 01010 2.7.17 D. What information is required to be displayed on conduit markers?

Response: Designer to specify and submit for approval.

22. RFP 01010 2.7.19: What type coaxial cable? What size NEMA 3R box is desired on roof and how much slack within? Is the box to be used as a "pull box" and should the slack (if any) be contained within for future extension or is this a splice point with connector installed and future penetration and connection by others? For bid purposes can you give us an estimated length or preferred location of the other ends, i.e.: Main telecomm room?

Response: Designer to select after coordination with equipment supplier.

23. Reference RFP 01010 2.7.20 refers to requirements for Special Systems: Are the quantities listed ($\underline{4@200A}$ and $\underline{4@20A}$) a total (minimum) to be provided for the entire facility or is this the quantity required at each maintenance location? As the quantities given are a minimum, is there a criteria-based requirement that would increase this number or are additional Special System receptacles to be considered a betterment?

Response: Each maintenance location.

24. Reference RFP 01010 2.7.20 refers to requirements for Special Systems: NOTE: In a previous Amendment a "DIAGRAM OF OVERHEAD & UNDERNEATH SERVICES (F-15) was provided. This shows 2 "electricity

reels" - are these considered part of the "specialty system" 120V receptacle?

Response: No.

25. Reference RFP 01010 2.7.20 refers to requirements for Special Systems: The F-15 uses either a EPU-6/E Frequency converter or a Type MC1A Motor Generator Set. During the first walk through at Hangar 10, a M32A-860 cart was located within the Hangar -is this cart also required to be supported by the special receptacles?

Response: Yes.

26. Reference RFP 01010 2.7.20 refers to requirements for Special Systems: Are all of the receptacles intended for simultaneous operation or is there a maximum anticipated demand for each "grouping" of these special systems. Given the potential impact of these large loads, the proper sizing of the service is dependent on this information.

Response: Designer to determine diversity based on all maintenance bays in operation.

27. Reference RFP 01010 2.7.20 refers to requirements for Special Systems: Is there an existing 200A plug assembly currently in use that the 200A receptacles are required to accept? Make and model number will allow proper matching.

Response: Designer to coordinate during design phase.

28. RFP 01012 3.4 Para F and G do not specifically identify Design Analysis criteria for the Electrical Design submittal (as is done in all of the other disciplines). Is there no requirement (other than calculations?) or are the criteria listed in Appendix B of ER 1110-345-700 to be used as is, un-modified by the RFP?

Response: Please refer to RFP 01012. Following is reprinted from this reference:

F. ELECTRICAL - EXTERIOR

- 1. Drawings:
 - a. Site Plan(s): Locations and sizing of all existing and new electrical equipment and circuitry including high and low voltage feeders, transformers, motors, controls, communications, telecommunications service entrance and closed circuit television service.
 - b. Grounding Plan: ground conductors, electrodes, receptacles, bonding locations and means for bonding.
 - c. Exterior Lighting Plan.
 - d. Electrical One-Line diagrams/Details.

G. ELECTRICAL - INTERIOR

- 1. Drawings
 - a. Power Plan Scale 1:100.
 - b. Lighting Plan Scale 1:100. Electrical and Mechanical Rooms shall have plans at either 1:50 or 1:25.

- c. Special Systems including: communications and data. Complete signal plans, including location and size of all devices related to such systems as telephone, CCTV, security, PA and intercom. Plan scale shall be 1:100, or 1:50. Signal drawings, with the exception of Fire Protection, shall be shown on dedicated plans. Fire Protection systems shall be shown on "FP" reference drawings.
- d. Panel board and Lighting Fixture Schedules: Panel board schedules shall include the designation, location, mounting (flush or surface), number of phases and wires, voltage, amp capacity and total connected load. Indicate the trip rating, frame sizeand interrupting rating. Branch circuits need not be shown.
- e. One-line diagram for power distribution and electrical feeders.
- f. Grounding Plan: ground conductors, electrodes, receptacles, bonding locations and means for bonding.
 g. Locate all light fixtures, controls, power devices, fire alarm initiating and indicating devices, telecom and data receptacles, panels and annunciators.
 h. Electrical Details, as required, including schematic diagrams, fixture schedules, transformer pad, trench section and utility pole(s) detail.
- 29. Reference RFP 01010 Part III Room Criteria sheets: Maintenance Bay There are three separate sections of the RFP that describe power requirements in this location: RFP 01010 2.7.20 requires "... minimum 4, 200A, 3 phase, 480V receptacles and 4, 20A, single phase 120V receptacles ...". RFP 01010 Part III Room Criteria calls for (a) "... 400Hz motor-generator set receptacles at each jet location". There are only three Bays (jets) in the Base bid The additional (4th) bay and external hardstands are Betterments. Is a fourth receptacle required for the Base Bid? If so where does it go?

Response: Provide the 4th receptacles with the additional bay betterment.

30. Reference RFP 01010 Part III Room Criteria sheets: Maintenance Bay - There are three separate sections of the RFP that describe power requirements in this location: RFP 01010 Part III (previous amendment) ended with diagrams for Service Requirements for the F-15. (Is it safe to assume the F-22 requirements are similar to the F-15?) These diagrams shows "ER" symbols and defines them as "electricity reels" and gives a quantity. Are these reels the 20A, 120V, receptacles required under RFP 01010 2.7.20 or are they additional devices? If they are the same thing, then is it correct to assume that 6 would be required for the base bid, 2 more for the additional bay and 2 per hardstand?

Response: Electricity reels are over the wing locations of aircraft and are separate and distinct from other receptacles.

31. ETL 01-2 Appendix A1.4.3.2 requires dual power sources when a single reliable power source is not available.

In order for the proposer's to classify the power supply status the following information is required:

Has there been forced downtime (of electric power) of 8 (or more) consecutive hours for any one incident over the last three years and is there 24 Hours of (total) downtime during the previous year?

Response: Assume dual power sources are required.